

Machine Id  
**VILTER MAIN VILTER B**  
Component  
**Compressor**  
Fluid  
**VILTER METHANE PAO 100 (--- GAL)**

**DIAGNOSIS**

**Recommendation**

No corrective action is recommended at this time. The filter change at the time of sampling has been noted. Resample at the next service interval to monitor.

**Wear**

All component wear rates are normal.

**Contamination**

There is a moderate amount of silt (particulates < 14 microns in size) present in the oil.

**Fluid Condition**

The AN level is acceptable for this fluid. The condition of the oil is suitable for further service.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			<b>TO60002353</b>	TO60001064	TO60001087
Sample Date	Client Info			<b>03 Apr 2024</b>	02 Oct 2023	07 Sep 2023
Machine Age	hrs	Client Info		<b>22352</b>	22352	22118
Oil Age	hrs	Client Info		<b>15636</b>	15870	15667
Oil Changed		Client Info		<b>Oil Added</b>	N/A	N/A
Sample Status				<b>ATTENTION</b>	ABNORMAL	NORMAL

WEAR METALS		method	limit/base	current	history1	history2
Iron	ppm	ASTM D5185m	>50	<b>2</b>	1	1
Chromium	ppm	ASTM D5185m	>5	<b>0</b>	0	0
Nickel	ppm	ASTM D5185m		<b>&lt;1</b>	0	0
Titanium	ppm	ASTM D5185m		<b>0</b>	0	0
Silver	ppm	ASTM D5185m		<b>0</b>	0	0
Aluminum	ppm	ASTM D5185m	>15	<b>&lt;1</b>	0	0
Lead	ppm	ASTM D5185m	>65	<b>0</b>	0	0
Copper	ppm	ASTM D5185m	>65	<b>2</b>	0	0
Tin	ppm	ASTM D5185m	>10	<b>&lt;1</b>	0	0
Vanadium	ppm	ASTM D5185m		<b>0</b>	0	0
Cadmium	ppm	ASTM D5185m		<b>0</b>	0	0

ADDITIVES		method	limit/base	current	history1	history2
Boron	ppm	ASTM D5185m		<b>0</b>	0	0
Barium	ppm	ASTM D5185m		<b>0</b>	0	0
Molybdenum	ppm	ASTM D5185m		<b>0</b>	0	0
Manganese	ppm	ASTM D5185m		<b>1</b>	0	0
Magnesium	ppm	ASTM D5185m		<b>1</b>	0	<1
Calcium	ppm	ASTM D5185m		<b>1</b>	0	<1
Phosphorus	ppm	ASTM D5185m		<b>0</b>	0	<1
Zinc	ppm	ASTM D5185m		<b>0</b>	0	3
Sulfur	ppm	ASTM D5185m		<b>387</b>	391	372

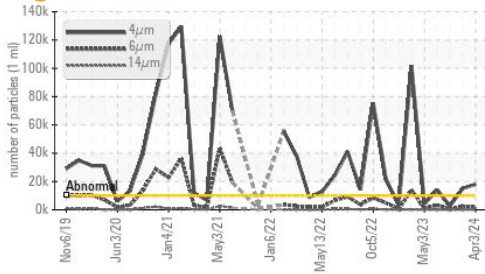
CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	>35	<b>31</b>	▲ 53	28
Sodium	ppm	ASTM D5185m		<b>2</b>	0	0
Potassium	ppm	ASTM D5185m	>20	<b>2</b>	0	2
Water	%	ASTM D6304	>0.1	<b>0.015</b>	0.081	0.081
ppm Water	ppm	ASTM D6304	>1000	<b>152</b>	811.5	810

FLUID CLEANLINESS		method	limit/base	current	history1	history2
Particles >4µm		ASTM D7647	>10000	● <b>18059</b>	● 15107	2649
Particles >6µm		ASTM D7647	>2500	● <b>2153</b>	● 2537	413
Particles >14µm		ASTM D7647	>320	● <b>69</b>	99	13
Particles >21µm		ASTM D7647	>80	● <b>20</b>	22	5
Particles >38µm		ASTM D7647	>20	● <b>1</b>	1	1
Particles >71µm		ASTM D7647	>4	● <b>0</b>	1	1
Oil Cleanliness		ISO 4406 (c)	>20/18/15	● <b>21/18/13</b>	● 21/19/14	19/16/11

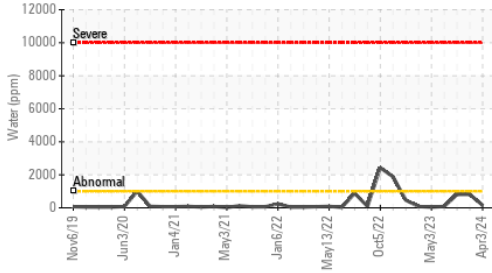
FLUID DEGRADATION		method	limit/base	current	history1	history2
Acid Number (AN)	mg KOH/g	ASTM D8045		<b>0.74</b>	0.318	0.99

# OIL ANALYSIS REPORT

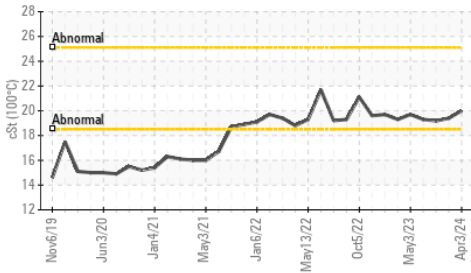
## Particle Trend



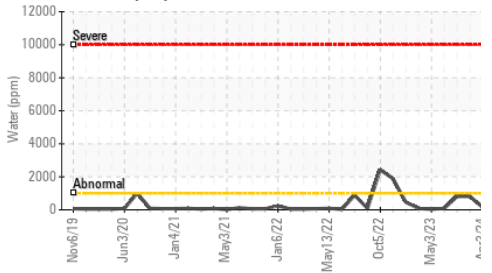
## Water (KF)



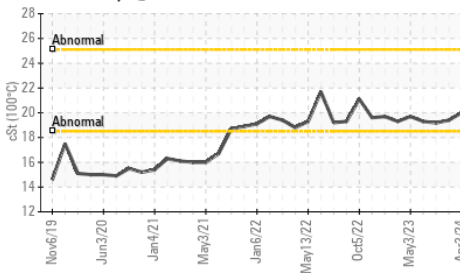
## Viscosity @ 100°C



## Water (KF)



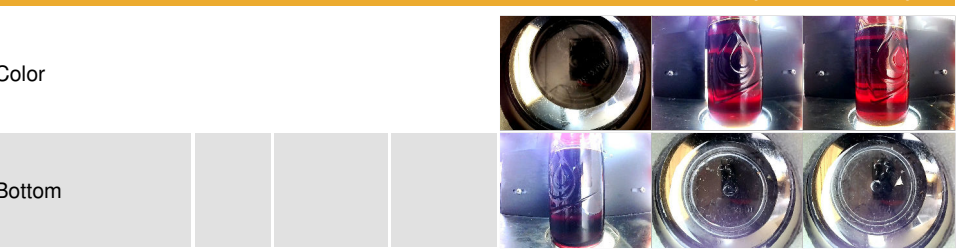
## Viscosity @ 100°C



VISUAL	method	limit/base	current	history1	history2
White Metal	scalar	*Visual	NONE	NONE	NONE
Yellow Metal	scalar	*Visual	NONE	NONE	NONE
Precipitate	scalar	*Visual	NONE	NONE	NONE
Silt	scalar	*Visual	NONE	NONE	NONE
Debris	scalar	*Visual	NONE	NONE	NONE
Sand/Dirt	scalar	*Visual	NONE	NONE	NONE
Appearance	scalar	*Visual	NORML	NORML	NORML
Odor	scalar	*Visual	NORML	NORML	NORML
Emulsified Water	scalar	*Visual	>0.1	NEG	0.2%
Free Water	scalar	*Visual		NEG	NEG

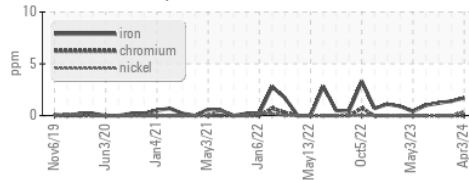
FLUID PROPERTIES	method	limit/base	current	history1	history2
Visc @ 40°C	cSt	ASTM D445	135	131	132
Visc @ 100°C	cSt	ASTM D445	20.0	19.4	19.18
Viscosity Index (VI)	Scale	ASTM D2270	170	168	165

## SAMPLE IMAGES

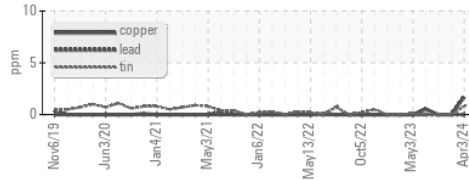


## GRAPHS

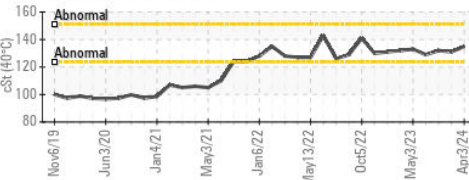
### Ferrous Alloys



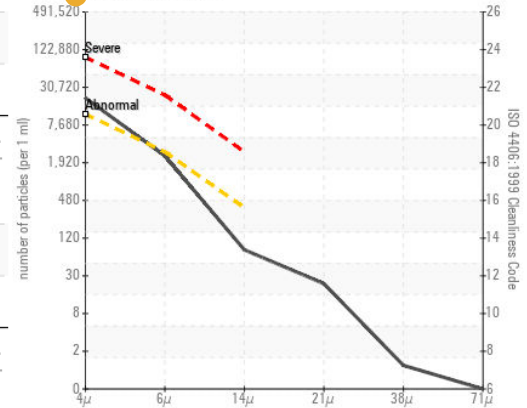
### Non-ferrous Metals



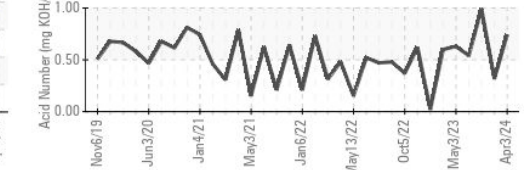
### Viscosity @ 40°C



### Particle Count



### Acid Number



Certificate L2367

**Laboratory** : WearCheck USA - 501 Madison Ave., Cary, NC 27513  
**Sample No.** : TO60002353  
**Lab Number** : 06151233  
**Unique Number** : 10981311  
**Test Package** : IND 2 ( Additional Tests: KF, KV100, PrtCount, VI )  
**Received** : 16 Apr 2024  
**Tested** : 19 Apr 2024  
**Diagnosed** : 19 Apr 2024 - Don Baldrige

**BLUE RIDGE RENEWABLES**  
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 F: x:

To discuss this sample report, contact Customer Service at 1-800-237-1369.

\* - Denotes test methods that are outside of the ISO 17025 scope of accreditation.

Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)